

REMARKS

1. Status of claims

After entry of the above amendment, claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115 are pending and under consideration. Claims 12-14, 16, 38-40, 42, 67-69, 81-83, 85, 99-101, and 114 are withdrawn from consideration.

2. Support for amendments

The limitation "wherein the backbone of the oxygen scavenging polymer is ethylenic" finds support in the specification at p. 8, line 5. The support is not *in haec verba*, but need not be (MPEP 2163.02). No new matter has been added by this amendment.

3. Claim rejections under 35 U.S.C. §103

Claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bansleben et al., U.S. Pat. No. 6,255,248 ("Bansleben") in view of Cahill et al., U.S. Pat. No. 6,083,585 ("Cahill"). In view of the above amendment, Applicants respectfully traverse this rejection.

First, Bansleben teaches blends of (i) oxygen scavenging polymers derived from vinyl polymerization of ethylene, cyclopentene, and optionally vinylcyclohexene (col. 3, lines 15-60), (ii) a transition metal catalyst (Abstract), and (iii) diluents, such as PET, PVC, or PVDC, among others (col. 4, lines 8-19). Cahill teaches block copolymers of polyesters, such as PET, with oxygen scavenging polyolefin oligomers, such as divalent polybutadienes (col. 12, lines 17-65 and Formulas VI-VIII).

Applicants disagree with the Examiner's allegation that "ethylenic backbone" encompasses, e.g., backbones containing heteroatoms or carbonyls. Oxygen scavenging polymers with heteroatom- or carbonyl-containing backbones were within the scope of the claims as originally filed, but claims reciting such backbones have been withdrawn and the scope of the pending claims under consideration has been narrowed. Applicants submit that a polymer produced from monomer units, wherein in each monomer unit contributes only two carbon atoms to the backbone of the polymer, has an ethylenic backbone (save for a small fraction of other units which the skilled artisan would understand could arise as a result of polymerization errors). Therefore, a polymer produced using a monomer unit that contributes three carbon atoms to the polymer backbone, resulting in the presence of propylenic units does not have ethylenic backbone. Thus, the polymer of Bansleben, which contains a significant fraction of propylenic units derived from 1,3-insertion of cyclopentene using racemic ethylenebis(indenyl)zirconium(IV)dichloride as the catalyst (10-30% 1,3-insertion of cyclopentene, as discussed in Applicants' previous submission) does not have an ethylenic backbone.

Because the polymers of Bansleben do not feature ethylenic backbones, and the oxygen scavenging polybutadiene blocks of the copolymer of Cahill are non-cyclic and present in the polymer backbone, not pendant to it, the combination of the references does not suggest an oxygen scavenging polymer "wherein the backbone of the oxygen scavenging polymer is ethylenic and the oxygen scavenging polymer comprises at least one cyclic olefinic pendant group."

Therefore, Applicants respectfully submit this rejection of claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115, as being obvious over Bansleben in view of Cahill, should be withdrawn.

4. Claim rejections under 35 U.S.C. §102

Claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115 are rejected under 35 U.S.C. §102(b) as being anticipated by Matthews et al., U.S. Pat. No. 6,254,804 ("Matthews"). Applicants respectfully traverse this rejection.

The Examiner points to Matthews as teaching, in Examples 11-12, the transesterification of ethylene vinyl alcohol (EVOH) with 3-cyclohexene-1-methanol, and combination of the transesterified EVOH with other EVOH, cobalt, and a photoinitiator. Applicants respectfully submit these examples do not teach what the Examiner alleges. Example 11 reports a polymer formed from the reaction of 3-cyclohexene-1-methanol with poly(maleic anhydride-alt-1-octadecene) and combination of the polymer with cobalt Ten-Cem and a photoinitiator. Example 12 reports a polymer formed from transesterification of polyethylene-co-methyl acrylate (EMAC) with 3-cyclohexene-1-methanol and combination of the polymer with cobalt oleate in *ethylene-vinyl acetate* (EVA) and a photoinitiator. The identity of "EVA" as ethylene-vinyl acetate is indicated by Matthews at col. 18, line 5. Examples 11-12 of Matthews therefore do *not* teach a blend of an oxygen barrier polymer, an oxygen scavenging polymer, and a transition metal oxidation catalyst.

For the above reasons, Applicants respectfully request this rejection of all pending claims under consideration, claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115, as anticipated by Matthews be withdrawn.

5. Conclusion

Applicants respectfully submit all pending claims under consideration, claims 1-4, 6-11, 15, 17-30, 32-37, 41, 43-66, 70-73, 75-80, 84, 86-91, 93-98, 102-113, and 115 are in condition for allowance. The Examiner is invited to contact the undersigned patent agent at (713) 934-4065 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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